6GK5

High-Mu Triode

7-PIN MINIATURE TYPE

For VHF-Amplifier Applications

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:		
Voltage (AC or DC)	6.3 ± 10%	volts
Current at 6.3 volts	0.18	amp
Direct Interelectrode Capacitances (Approx.):[a]		
Grid to plate	0.52	μμf
Grid to cathode, internal shield, and heater	5	μμf
Plate to cathode, internal shield, and heater	3.5	μμf
Heater to cathode	2.5[b]	μμf

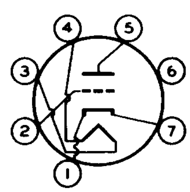
Characteristics, Class A_1 Amplifier:

Plate Voltage	135	volts
Grid Voltage	-1	volt
Amplification Factor	78	
Plate Resistance (Approx.)	5400	ohms
Transconductance	15000	μmhos
Plate Current	11.5	ma
Grid Voltage (Approx.) for transconductance (μmhos) =		
150	-4.2	volts
1500	-2.5	volts
Input Resistance[c]	275	ohms
Input Capacitance[c]	11.2	μμf
Noise Figure[d]	4.7	db

Mechanical:

Operating Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	See *General Section*
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW	7FP

Pin 1 – Cathode
Pin 2 – Grid
Pin 3 – Heater
Pin 4 – Heater



Pin 5 – Plate
Pin 6 – Internal Shield
Pin 7 – Cathode

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AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

PLATE VOLTAGE	200 max.	volts
GRID VOLTAGE:		
Negative-bias value	50 max.	volts
Positive-bias value	0 max.	volts
AVERAGE CATHODE CURRENT	22 max.	ma
PLATE DISSIPATION	2.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	100 max.	volts
Heater positive with respect to cathode	100 max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:		
For cathode-bias operation	1 max.	megohm

[a] With external shield JEDEC No.316 connected to cathode except as noted.

[b] With external shield JEDEC No.316 and internal shield connected to ground.

[c] Measured at 200 Mc with heater volts = 6.3 and plate effectively grounded for rf voltages.

[d] For a neutralized triode amplifier at a frequency of 200 Mc with signal-source impedance adjusted for minimum noise output.

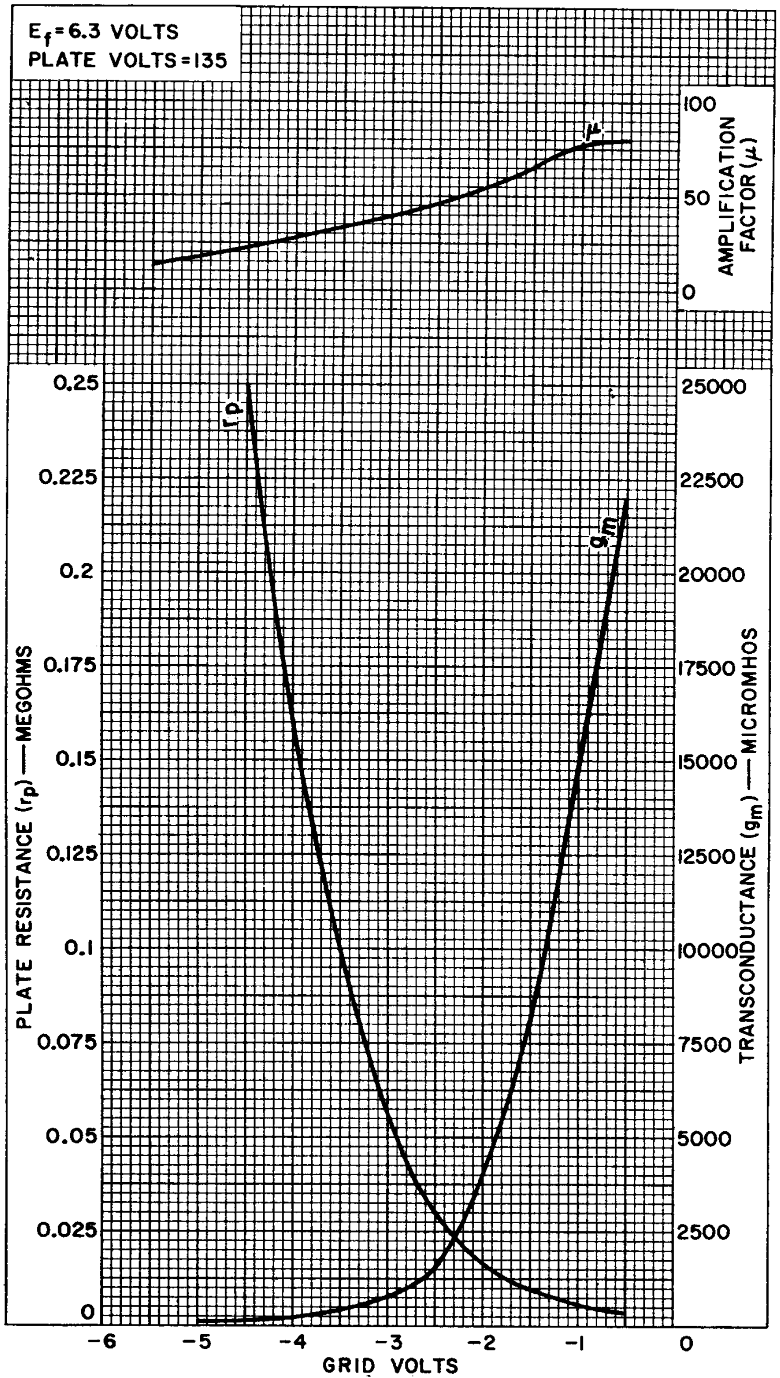
AVERAGE PLATE CHARACTERISTICS



92CM-11024

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AVERAGE CHARACTERISTICS



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